OPERATING INSTRUCTIONS

AND PARTS LIST FOR

ALLSTATE

BATTERY BOOSTER

COMBINATION 6 AND 12 VOLT–6 AMP.

MODEL NUMBER 608.71640

This is the model number of your Allstate Battery Booster, and it will be found on the booster nameplate. Always give this model number when communicating with us regarding this unit, or when ordering parts.

HOW TO ORDER REPAIR PARTS

All parts listed herein may be ordered through Sears, Roebuck and Co. or Simpsons-Sears Limited. When ordering parts by mail from the mail order house which serves the territory in which you live, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS ALWAYS GIVE THE FOLLOWING INFORMATION:

1. The Part Number in this List.
2. The Part Name in this List.
3. The Model Number of your Booster which is Number 608.71640

This list is valuable. It will assure your being able to obtain proper parts service at all times. We suggest you keep it with other valuable papers.

SEARS, ROEBUCK AND CO.

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OPERATING INSTRUCTIONS FOR
ALLSTATE BATTERY BOOSTER MODEL NUMBER 608.71640

Before attempting to operate your Battery Booster, read all of the instructions contained in this folder.

OVERLOAD PROTECTION:

An automatic thermal type circuit breaker protects your booster against overloads and shorted output. Such overloads cause the thermal switch to open (indicated by a pronounced "ping" as it snaps open and also by the meter indicator returning to "off" position). The thermal switch will automatically reset itself to closed position after a short period of cooling off in the open position. Whenever the thermal switch trips open, check for IMPROPER BATTERY CONNECTIONS, improper toggle SWITCH POSITION, or other causes of overloads before attempting to operate booster.

Your booster can be USED ONLY to charge batteries as follows:

(a) ONE 6 VOLT BATTERY:

To charge a single 6 Volt battery, the toggle switch MUST BE SNAPPED to the 6 VOLT POSITION. DO NOT attempt to charge ONE 6 VOLT BATTERY with toggle switch in the 12 VOLT position or your booster will be subjected to an OVERLOAD CONDITION.

Proceed in accordance with further instructions below:

(b) TWO 6 VOLT BATTERIES:

First, connect the two 6 VOLT BATTERIES in series. (POSITIVE (+) terminal of No. 1 battery connected to NEGATIVE terminal of No. 2 battery). Then attach booster NEGATIVE battery clip to FREE NEGATIVE terminal of battery No. 1 and POSITIVE booster clip to the FREE POSITIVE battery terminal of battery No. 2. The toggle switch must be in the 12 VOLT POSITION.

Proceed in accordance with further instructions below:

(c) ONE 12 VOLT BATTERY:

The toggle switch must be snapped to the 12 VOLT POSITION.

Proceed in accordance with further instructions below:

No. 1. One booster battery clip (red) is marked POSITIVE (+). Attach POSITIVE (+) clip to POSITIVE (+) battery terminal and the other clip to NEGATIVE (−) battery terminal. Battery terminals are marked (+) and (−). The POSITIVE (+) battery terminal is usually larger than the NEGATIVE (−) and is sometimes painted RED. Make certain booster battery clips make good connections to the battery terminals.

No. 2. Booster battery clips should always be attached DIRECTLY TO THE BATTERY TERMINALS. If the battery booster clips cannot be attached directly to the battery terminals, consult your car dealer or the car manufacturer for information on whether the POSITIVE (+) or NEGATIVE (−) battery terminal of your particular make and model of car is "grounded" (attached to the frame or other structural metal part of the car). Then attach proper booster clip to frame or motor; POSITIVE clip if the POSITIVE of the battery is "grounded" and NEGATIVE clip if the NEGATIVE of the battery is "grounded". The other or free booster clip may then be attached to the starter cable or other wiring WHICH IS DIRECTLY CONNECTED TO THE "HOT" OR "UNGROUNDED" TERMINAL of the battery.

No. 3. After the booster clips are PROPERLY CONNECTED to the battery terminals, the AC cord plug is then inserted into a power supply of 105-120 VOLTS, 50-60 CYCLES, ALTERNATING CURRENT ONLY. Make certain booster battery clips are PROPERLY attached to battery terminals; POSITIVE (+) booster clip to POSITIVE (+) battery terminal and NEGATIVE (−) booster clip to NEGATIVE (−) battery terminal before inserting AC cord plug into power supply line. While attaching booster clips to battery terminals, watch for sparking between battery terminals and battery booster clips. Sparking is an indication that the booster clips are connected IMPROPERLY. A full scale reading on the ammeter with the booster AC plug disconnected from power source is another indication of REVERSE connections to the battery.

No. 4. If the booster clips are IMPROPERLY CONNECTED to battery terminals and the AC cord plug is inserted into power supply line, the thermal switch will keep tripping to "Open". Disconnect plug from power supply line and reverse booster clip connections to battery.

Connecting the booster clips IMPROPERLY to the battery terminals subjects both the booster and the battery to an overload condition. Avoid this overload condition by always making certain that the POSITIVE (+) booster red clip is attached to the POSITIVE (+) terminal of the battery.

No. 5. If the booster is otherwise OVERLOADED (indicated by thermal switch tripping open and by excessive ammeter deflection), DO NOT OPERATE booster until correcting cause of overload. The overload may be caused by shorted battery cells, shorted output, improper toggle switch position or by a battery below a nominal discharge condition. CORRECT CAUSE OF OVERLOAD before attempting to use booster.

No. 6. Your booster delivers a tapered rate of charge. Assuming the power line voltage of your locale to be 117 Volts, the booster will deliver a 6 Ampere minimum charge to a battery discharged nominally. As the battery acquires charge, the booster charging rate drops. With a 50% charged battery, the charging rate will always be approximately 4.5 Amperes. With a fully charged battery, the charging rate will always be approximately 3 Amperes. The charging rate, therefore, is always dependent on the amount of "charge" your battery already contains.

With a power line voltage lower than 117 Volts, the charging rates at the different levels of "state of charge" of the battery will be proportionately lower than those outlined above.

Once the battery becomes fully charged, the booster DOES NOT TURN ITSELF OFF, but continues to deliver the final "charged battery" rate of approximately 3 Amperes until the booster is DISCONNECTED from the battery. The hydrometer reading of a battery fully charged and in good condition should be approximately 1250.

After the battery has acquired a full charge, the booster should be disconnected from the power line and from the battery. If the water level of the battery is maintained, it is satisfactory to leave the booster operating on a fully charged battery for a period of approximately 100 hours. However, the booster DOES NOT deliver a "TRICKLE" or "FLOATING" rate of charge and should, therefore, not be left unattended and connected to a fully charged battery for EXTENDED PERIODS of time beyond approximately 100 hours.

A battery discharged abnormally may cause an excessively high charging rate at the beginning of charging. This excessive rate can be reduced by disconnecting either booster clip and inserting 6 to 8 feet of lamp cord or similar No. 18 insulated wire into the output circuit as illustrated on sketch below.

No. 7. Check water level in battery before charging. Water should always be above the top of battery plates and as recommended by the manufacturer of the battery.

No. 8. DISCONNECT AC line cord first and THEN REMOVE battery clips from battery when booster is disconnected.

No. 9. The proper length and size of the booster battery cord (cord with attached battery clips) has been carefully determined for maximum charger efficiency. DO NOT CHANGE SIZE OR SHORTEN the length of this cord.

No. 10. Your booster is U. L. approved and will give years of trouble-free service if used according to instructions.

No. 11. Your booster may be used to assist a "weak" car battery in "turning over" a car motor for starting. Attach battery booster to car battery as per above instructions. Then, proceed to start car engine in the usual manner.

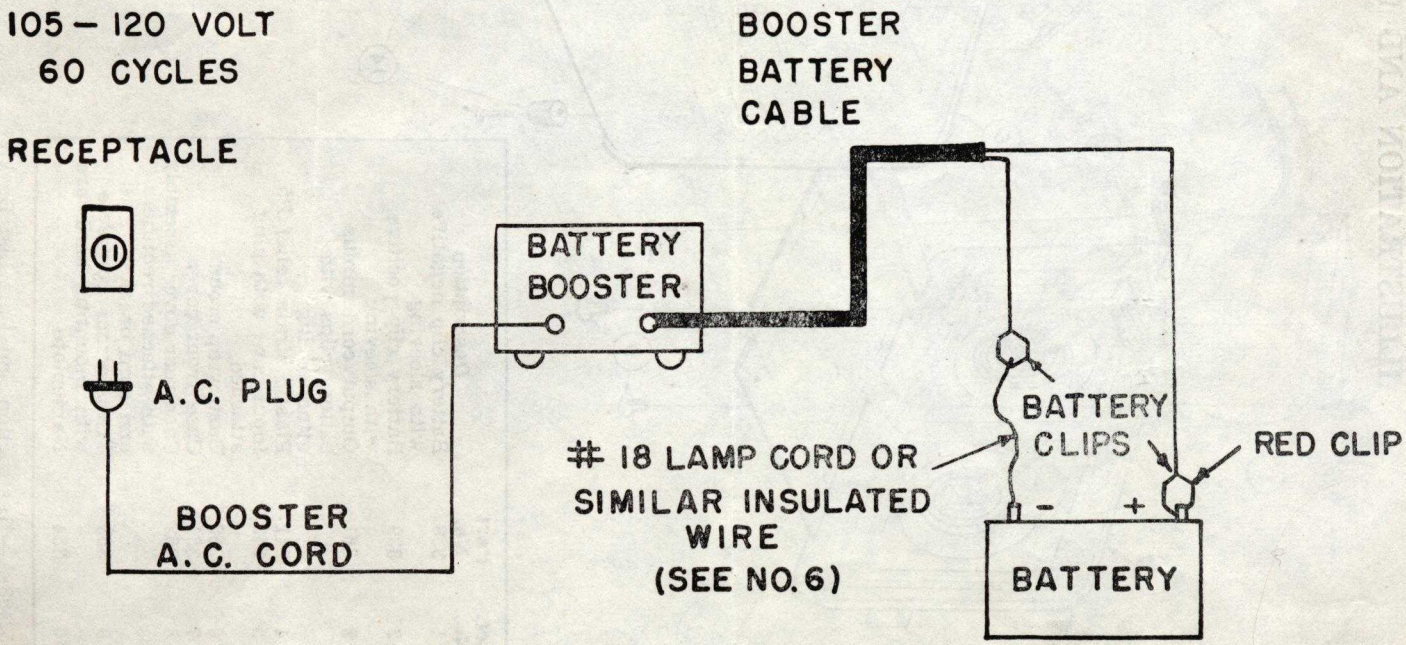
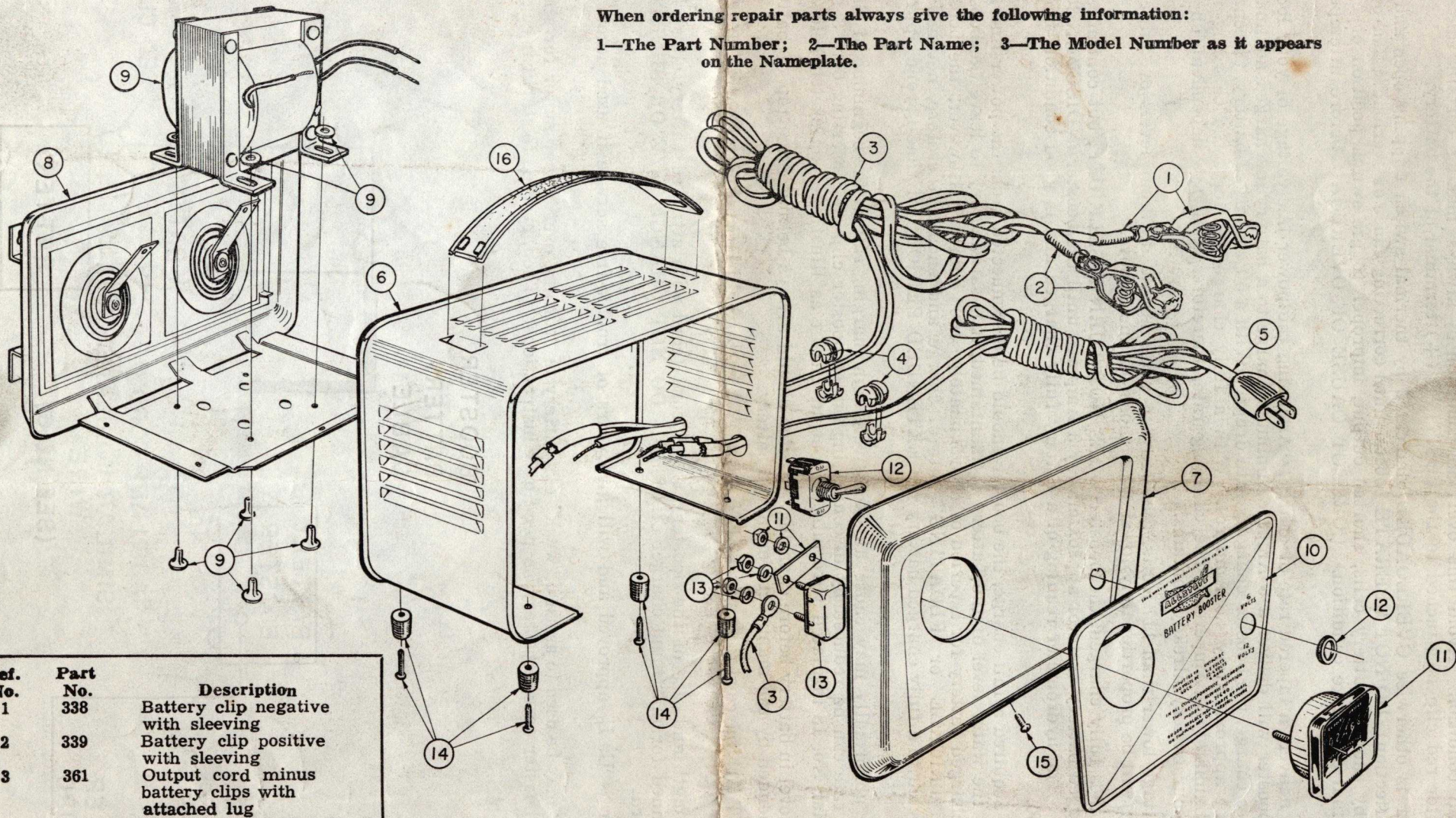


ILLUSTRATION AND PARTS LISTS FOR ALLSTATE BATTERY BOOSTER MODEL 608.71640

When ordering repair parts always give the following information:

1—The Part Number; 2—The Part Name; 3—The Model Number as it appears on the Nameplate.



Ref. No.	Part No.	Description
1	338	Battery clip negative with sleeving
2	339	Battery clip positive with sleeving
3	361	Output cord minus battery clips with attached lug
4	341	Plastic strain relief P5
5	342	Input cord with plug attached
6	350	Case wrap around
7	351	Case front cover
8	352	Case rear cover assembly with attached rectifiers and cord bracket
9	353	Transformer complete with mounting hardware
10	354	Nameplate
11	355	DC ammeter with connecting link
12	356	Switch, Type L62D
13	357	Thermal switch 10 A with mounting hardware
14	358	Rubber feet with mounting studs
15	359	Package of sheet metal screws, No. 8
16	360	Plastic handle

A-52498-A—*Instruction and Part List Booklet

***Additional booklets available upon request from Acme Electric Corporation, Cuba, New York**